

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

TRIAL BURN REPORT OUTLINE



**PREPARED BY LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY**

ENGINEERING GROUP 2

2007

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
GUIDANCE FOR ORGANIZATION, CONTENT AND FORMAT

TRIAL BURN REPORT

(notes are in italics)

CERTIFICATION FORM

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- 7.2 QAPP Deviations and Corrective Actions (*include QAPP deviations in Table 1.3*)
- 7.3 Project Personnel and Responsibilities
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- 10.0 METHODS FOR CONTINUING COMPLIANCE**
How the facility plans to retain compliance with its RCRA limits.

APPENDICES

**Page numbers shall be included on each page of the appendices.
Each appendix shall include a Table of Contents.**

APPENDIX A – STACK SAMPLING REPORT

- A.1 Narrative
- A.2 Summary of sampling and stack gas conditions *(Include sample volumes, molecular weight, moisture, stack gas temperature and flow, etc.)*
- A.3 Calculation of sample point locations, in accordance with Method 1
- A.4 Example calculation of average velocity/volumetric flow rate, in accordance with Method 2
- A.5 Example calculation of dry molecular weight, in accordance with Method 3
- A.6 Example calculation of moisture content, in accordance with Method 4
- A.7 Field Data Sheets. *Organized by method, then condition and run, included for all methods and all completed runs. Field data sheets should be copies of originals and not rewritten.*
- A.8 Independent CEMS information. *This should include calibration data and data collected from the CEMS during testing.*
- A.9 Analyses performed by stack sampling company *(Include summary and full data package. Data package must follow analytical data package format.)*
- A.10 Stack sampling equipment calibration data
- A.11 Certification of Lab Accreditation Status

APPENDIX B – FEEDSTREAM SAMPLING REPORT

- B.1** Field Sampling Logs. *Indicate sampling method, time, and frequency. Field data sheets should be copies of originals and not rewritten.*
 - B.1.1** Vent Feed Sampling
 - B.1.2** Waste Feed Sampling
 - B.1.3** Residue Sampling (e.g. scrubber effluent)
- B.2** Process knowledge and how obtained *(if applicable)*

APPENDIX C – SPIKING REPORT

- C.1** Narrative. *Include details on technique, injection point, spiking solutions, QA/QC, and any problems incurred.*
- C.2** Certificates of Analysis for Spiking Solutions
- C.3** Field Logsheets. *Field data sheets should be copies of originals and not rewritten.*
- C.4** Run Totalizer Data *(if continuous measurement device used)*
- C.5** Data in graphical form *(if available)*
- C.6** Data in tabular form *(include date and time)*
- C.7** Pre- and Post-Test Calibration Sheets for Spiking Equipment

APPENDIX D – QA/QC DATA REPORT

- D.1** Field Sampling QA/QC *(provided by QAO and 3rd party auditor or as specified in the QAPP – see document “Scope of Duties for Project QAO” for information on what should be included in QAO’s report)*
- D.2** Overall Lab QA/QC *(provided by the QAO - see document “Scope of Duties for Project QAO” for information on what should be included in QAO’s report)*

APPENDIX E (Reserved)

APPENDIX F – SAMPLE EMISSIONS CALCULATIONS

- F.1** Nomenclature Table with terms, acronyms, and abbreviations
- F.2** Example Calculations. *For ANY and ALL calculations in the report, including units on everything. Equations must be explained in detail and contain any necessary references to equation development and data used in the equations. Data calculations must explain the handling of non-detect values and blank corrections.*
 - F.2.1** Feed rate calculations
 - F.2.2** Stack sampling calculations (unless included in Appendix A)
 - F.2.2.1** Volume of dry gas sampled
 - F.2.2.2** Volume of water vapor collected
 - F.2.2.3** Percent moisture
 - F.2.2.4** Average molecular weight of stack gas
 - F.2.2.5** Percent excess air at sample point
 - F.2.2.6** Percent isokinetic sampling
 - F.2.2.7** DRE and SRE *(as applicable)*
 - F.2.2.8** Particulate emissions results. *Including cyclone, probe, filter, stack gas concentration at actual and STP conditions, emission rate, and size distribution.*

- F.2.2.9** Metals emissions results. *Including filter, impinger content, stack gas concentration at actual and STP conditions, emission rate, and metals removal efficiency. Include calculations for metals extrapolation.*
- F.2.2.10** HCl/Chlorine emissions results. *Including impinger content, stack gas concentration at actual and STP conditions, emission rate, and removal efficiency.*
- F.2.2.11** Organic emissions results. *Including XAD, tenax/tenax-charcoal, stack gas concentration at actual and STP conditions, emission rate.*

F.2.3 Other

APPENDIX G- OPERATING DATA REPORT

- G.1** Process Data. *Organized by condition and by run, including time and all regulated parameters (with units of measurement), i.e. combustion chamber temperature, hazardous waste feed rate, vent flow rate, inlet temperature to APCE, CEMS data, etc. Data must start when sampling starts and end at or after sampling completion.*
 - G.1.1** Data in tabular form
 - G.1.2** Data in graphical form (trend diagrams) *(if available)*
- G.2** Data on batch feed sizes and blending ratios
- G.3** Fugitive Emissions Inspection Logs *(Applicable if unit does not comply with negative pressure requirement.)*

APPENDIX H – FIELD LOGS *(Data collected and/or observations made by personnel)*

- H.1** Facility Personnel *(if available)*
- H.2** Test Coordinator
- H.3** Quality Assurance Officer
- H.4** Process Samplers
- H.5** Lab Personnel *(if present in the field)*
- H.6** 3rd party auditor, if required *(Unless report is submitted to the Agency as a separate report.)*
- H.7** Sample Custodian

APPENDIX I – ANALYTICAL DATA PACKAGES

Separate individual lab packages with tabbed dividers. Analytical data packages must follow the format guidance "Data Package Organization".

APPENDIX J - RESUMES

For all personnel listed on the project's organizational chart

ABBREVIATIONS

CPM = Hazardous Waste Combustion Permitting Manual, EPA Region 6, 1998.

TRIAL BURN REPORT SUMMARY TABLES

Tables provided in this report format are provided for guidance only. Tables may be revised as necessary as long as all required information remains in the test report.

Table	Title
1.1	Summary of Key Results
1.2	Summary of Key Operating Parameters
1.3	Summary of Deviations and Exceptions
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7.7	Summary of Sampling and Analytical QA/QC: Stack Gas - PCDD/PCDF
7.8	Summary of Sampling and Analytical QA/QC: Stack Gas - HCl/Cl ₂
7.9	Summary of Sampling and Analytical QA/QC: Waste Feedstream #1 - Volatile Organics
7.10	Summary of Sampling and Analytical QA/QC: Waste Feedstream #1 - Semi-Volatile Organics
	Add additional Summaries of Sampling and Analytical QA/QC as needed
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8.1	Proposed Operating Limits

9.1	Method Detection Limits (MDL's) for Analytes Used in Risk Assessment
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9.3	PCDD/PCDF Emission Results TEQ Basis
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9.11	PCB Emissions - Totals
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FORMAT REQUIREMENTS

General Requirements

1. Tables provided in this report format are provided only for guidance. Tables may be revised as necessary as long as all required information remains in the test report.
2. Table of Contents must refer to specific volume and page numbers. Each page of the report (including appendices) shall have a unique page number. Reports need not be numbered sequentially throughout all volumes, as long as each page in each volume contains a unique page number. Example: Page 17 of Appendix E may be numbered as E-17.
3. Reports for two combustion units may be combined only if they are of similar type (e.g., liquid injection).
4. All hard copies of the report shall be 2-sided. At least five paper copies shall be required – two for LDEQ review, one for EPA review, one for the parish library, and one for LDEQ permanent records. Additionally, a CD containing the information in the main body of the report in PDF and the tables in Excel or PDF must be submitted to LDEQ. Applicant shall contact the LDEQ permit writer for specific instructions.
5. Tables shall either be included in the back of the same section as the discussion or put together in a separate, clearly marked section.
6. Any appendix that amounts to more than one volume shall be designated by the appendix letter followed by sequential 1, 2, 3.
7. Report volumes shall be limited to ring binders three inches or less in size.
8. Each bound volume, including appendices, shall be tabbed and indexed by section.